

## DECISION RECORD

Decision: It is my decision to authorize the issuance of a term grazing lease for public lands on the Marley Ranches, LTD., Allotment #65009 for the term of ten years. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed treatment were considered and any necessary changes have been incorporated into the environmental assessment.

The fundamentals of rangeland health are set forth in 43 CFR 4180.1 and pertain to watershed functions, ecological processes, water quality and habitat for threatened and endangered (T&E) species and other special status species. Based on the available data and professional judgement, the evaluation by this environmental assessment indicates that the conditions identified in the fundamentals of rangeland health exist on the allotment..

In accordance with 43 CFR 4160.2, any applicant, permittee, lessee, or other affected interests may protest this proposed decision in person or in writing to the authorized officer within 15 days after receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this decision will become final without further notice.

Written appeal may be filed to the Final Decision for the purpose of a hearing before an administrative law judge under 43 CFR 4.470. A period of 30 days after receipt of the Final Decision is provided in which to file an appeal in this office. (43 CFR 4160.3 (c))

Signed by T. R Kreager  
Assistant Field Manager

5/19/99  
Date

**ENVIRONMENTAL ASSESSMENT  
for  
GRAZING AUTHORIZATION**

**ALLOTMENT 65009, SECTION 15**

**EA-NM-066-99-054**

**September, 1998**

**U.S. Department of the Interior  
Bureau of Land Management  
Roswell Field Office  
Roswell, New Mexico**

# **Environmental Assessment for Grazing Allotment 65009**

## **I. Background**

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### **A. Introduction**

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing lease on Allotment 65009.

The scope of this environmental assessment is limited to the effects of issuing a new grazing lease on Allotment 65009. Over time, the need could arise for subsequent management activities which relate to grazing authorization. These activities could include vegetation treatments (e.g., prescribed fires, herbicide projects), range improvement projects (e.g., fences, water developments), and others. Future management actions related to livestock grazing would be addressed in project-specific NEPA documents as they are proposed.

### **B. Purpose and Need for the Proposed Action**

The purpose of issuing a new grazing lease would be to authorize livestock grazing on public range on Allotment 65009. The lease would be needed to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR 4130.3, 4130.3-1, and 4130.3-2.

### **C. Conformance with Land Use Planning**

Upon review of the Roswell Resource Management Plan/Environmental Impact Statement (Bureau of Land Management 1997), the proposed action was found to conform with the Record of Decision as required by 43 CFR 1610.5-5.

### **D. Relationships to Statutes, Regulations, or Other Plans**

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management; and Executive Order

11990, Protection of Wetlands.

## **II. Proposed Action and Alternatives**

### **A. Proposed Action:**

To authorize the grazing lease on the Marley Ranches, LTD., allotment # 65009 for 35 AU's (420 AUMs at 100% public land). Specifically, to authorize a grazing lease for 35 cows from March 1 to the last day of February of each year at 100% public land, while continuing current livestock management practices.

### **B. No Permit/Lease authorization alternative:**

This alternative, if selected, would be to not issue a new grazing lease for the Marley Ranches LTD. allotment #65009. No grazing would be authorized on federal land under this alternative. The No Grazing alternative was considered, but not chosen in the Rangeland Reform Environmental Impact Statement (EIS) Record of Decision (ROD) (p. 28). The elimination of grazing in the Roswell Field Office Area was considered but eliminated by the Roswell RMP/ROD (pp. ROD-2).

## **III. Affected Environment**

### **General Setting**

Allotment #65009 is in Chaves County, about 46 miles Northeast of Roswell. This allotment consists of approximately 2,920 acres of federal land, 4,140 acres of State Land, and 16,900 acres of private land (see map). Currently this allotment is categorized as a "C" or custodial allotment. In general, the area of the allotment 65009 predominately consists of mesquite grasslands with interspersions of sandy mesquite hummocks and shinnery oak sandhills on the north and far eastern sides. The public land is characterized as a shinnery oak dune plant community. However, the public land on this particular allotment is on the extreme western edge of the so-called mescalero sands and does not support large amounts of shinnery oak/bluestem vegetation. Annual precipitation for this region averages 12 -13 inches.

The permitted use on Section 15 Leases is established by the amount of forage produced on the public lands within the lease. The overall livestock numbers on the allotment are not established by the Bureau of Land Management. In southeast New Mexico, this is due primarily to either the small amount of public land and/or the public lands are situated in small or isolated tracts that can not be managed as efficiently as larger well blocked public lands.

The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotment #65009; Prime/Unique Farmland,

Cultural Resources, Native American Religious Concerns, Wild and Scenic Rivers, Hazardous Wastes, water quality, riparian/wetlands, floodplains, Areas of Critical Environmental Concern, and Minority/low Income populations.

Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities except where criteria to exempt surveys are met. Eligible and potential eligible sites would continue to be protected from damage or archaeologically treated to mitigate damage.

The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

## **A. Affected Resources**

1. Soils: There are at least seven major soil units on this allotment including; Roswell-Jalmar-Pyote association(JRC), Faskin association(FaA), Pyote-Faskin association(PYB), Ratliff-Redona association(RBA), Redona-Caney association(RHA), Jalmar-Roswell association(RPD) and Faskin-Roswell association(FRB).

These soils exhibit permeability ranging from moderate to rapid. Their water capacity runs from low to very high. Water erosion hazard for the soils is slight to moderate. While soil blowing hazard is generally very high.

According to the Soil Survey of Chaves County, New Mexico, Northern Part, when overgrazing occurs on these soil sites, shinnery oak, sand sagebrush and mesquite invade.

### **2. Vegetation:**

There are two primary ecological (range) sites on this allotment. The Sandy Plains CP-2, and the Sandy Loam CP-2. Vegetation is comprised of mesquite, yucca, cholla, some patches of shinnery oak, sand sagebrush, acacia, with grama, bluestem and dropseed being the dominant grasses. Currently, the Roswell Field Office (RFO) has limited vegetative data for this allotment because of the allotment categorization. There have been no vegetative monitoring studies done on this allotment since the initial vegetation inventory completed in 1977. Data at that time placed the public lands in a fair ecological rating (47%).

The RMP/EIS established resource objectives for the Shinnery Oak Dune community. The vegetative cover by percent composition objectives for the SOD community are grasses 50 - 70 %, forbs 10 - 15 %, shrubs & trees 25 - 40 %. The ground cover objectives for this community are: bare ground 5 - 20 %, litter 25 - 70 %, small & large rock 0 - 1 %, grass & forbs 16 - 40 % and shrubs & trees 3 - 17 %.

A recent field review of the public lands on this allotment compared the existing ground cover to the average ground cover for a Sandy Loam CP-2 ecological site is in mid to high fair condition. Average vegetative production composition is 4-5 % forbs, 72 % grasses and 23 % shrubs and trees. The average vegetative cover composition is 1 % forbs, 81 % grass, 17 % shrubs and .5% trees. The average ground cover composition for this site is approximately 43 % bare ground, 26 % litter, less than 1% rock, 22% grass and forb and 7% shrub and trees.

The field review also reflects the grass component is dominated by black and hairy grama, threeawns, dropseeds, and to a lesser extent on the north and eastern sides by bluestems, sand paspalum, and fall witchgrass. The shrub component is dominated by mesquite, sand sage, yucca and some shinnery oak; the forb component is comprised of a variety of both annual and perennial species.

The current vegetative resources on this allotment appear to be adequate to support multiple use objectives and the rangeland trend is improving. The data used for this assessment is available at the Roswell Field Office.

### 3. Wildlife:

The Eastern portion of this allotment is located within the Caprock Wildlife Habitat Area (WHA). The Caprock WHA provides diverse habitat for more than 54 birds species, 33 species of mammals, and 36 species of reptiles and amphibians.

Raptors that are frequently associated with the vegetation types on this allotment are the red-tailed hawk, swainson's hawk, ferruginous hawk, roughlegged hawk, common nighthawk, and the american kestrel.

Game bird species in this areas include the lesser prairie chicken, scaled and bob white quail, and the mourning dove.

Other bird species that are usually observed are the turkey vulture, roadrunner, chihuahuan raven, great-homed owl, burrowing owl, northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, homed lark, and other passerine birds.

At least 33 species of mammals occur on or utilize this allotment. The diversity of small mammals provide for an excellent prey base for carnivores such as the coyote, gray fox, bobcat, raccoon, badger, hooded skunk and striped skunk.

Mammals that provide a prey base include the black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mice, deer mouse, kangaroo rats, northern grasshopper mouse, harvest mice, and the white throated woodrat.

Two big game species that occur the allotment are pronghorn antelope and mule deer.

Reptiles and amphibians that inhabit the area are the dune sagebrush lizard, southern prairie lizard, lesser earless lizard, side-blotched lizard, longnose leopard lizard, sixlined racerunner, tree lizard, skinks, western diamond back, western rattlesnake, coachwhip, spadefoot toads, western box turtle, and the yellow mud turtle.

#### 4. Threatened/Endangered Species

Federal threatened, endangered and candidate species as well as state-listed threatened or endangered species potentially occurring within the proposed project area will be analyzed in this document.

There are no known Federal threatened and endangered species or critical habitat within the allotment.

However, there are several Federal Candidate and State listed species that occupy or utilize the area. These include the swift fox, mountain plover, lesser prairie chicken, sand dune lizard and the black-tailed prairie dog. For a detailed description of the range, habitats, and potential threats to the swift fox and the mountain plover, refer to the Biological Opinion (AP11-38) in the RMP.

#### Special Status Species:

##### Sand Dune Lizard

The State Threatened sand dune lizard only occurs in the southeastern corner of New Mexico and the western region of Texas. Within that range its habitat is restricted to active sand dunes and their peripheries (Degenhardt and Jones 1972). Shinnery oak is the dominate plant species that surrounds the top edge of the active sand dune, with a small composition of grasses inside the blowout area.

During 1991 a study was begun to examine the effects of the removal of shinnery oak on lizard habitat. Through five years of research it was demonstrated that there were 70%-94% fewer lizards in treated pastures as compared to non-treated pastures. As a result, the use of herbicides within suitable sand dune lizard habitat (blowouts) will be avoided.

Due to the absence of shinnery oak/Dune blowouts, the majority of the allotment contains very little sand dune lizard habitat. There are areas of shinnery oak, but no blowout complexes exist.

##### Lesser Prairie Chicken

Several years ago a petition was filed with the U. S. Fish and Wildlife Service (FWS) to list the prairie chicken as threatened. On June 1, 1998 the FWS announced a finding for the petition. After review of all available scientific and commercial

information, the Service finds that listing this species is warranted but precluded by other higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants. The lesser prairie chicken is added to the Service's candidate species list.

In southeastern New Mexico, lesser prairie chickens exist in the shrub-dominated High Plains Bluestem Subtype by using mixed stands of tall grass and shinnery oak.

Lesser prairie chickens rely upon a variety of habitat types within the shinnery oak tall grass community. Seasonal habitat requirements vary from season to season and are often overlapping. This specific allotment contains very little nesting habitat since the dominating soils do not support the quantity of bluestems required for nesting; but may provide booming areas (leks), brood habitat and some foraging habitat.

As with most wildlife species, especially upland game birds, precipitation plays a large role in population fluctuations and habitat conditions. Precipitation patterns have fluctuated drastically for the last twenty years. During the middle eighties precipitation was above normal and chicken populations responded very well. Except of two years, precipitation has been well below normal during the 1990's.

#### Population Monitoring Data

The Roswell Field Office has actively monitored prairie chicken booming grounds, population trends and habitat since the early seventies. Historically in New Mexico, the LPC occupied most of the eastern plains. However, numbers and occupied range of the species are much reduced since pre-settlement times; apparently in response to prolonged heavy grazing and brush control in combination with the great drouths of the 1930's and 1950's. It has been reported that currently the LPC occupies approximately one half their original range in New Mexico.

Since the early 1970's LPC populations have fluctuated up and down with the highest period occurring during the middle 1980's. No verified booming grounds have been documented on this specific allotment.

#### 5. Livestock Management:

The allotment is grazed by cattle. The allotment consists of eight pastures, ranging from 2 to 4 sections in size. The permittee runs a best pasture rest rotation system, with several pastures receiving adequate rest to ensure resources are being maintained. The allotment is watered by pipeline systems supplied by wells and by dirt tanks. As was stated earlier the BLM does not normally set the total livestock numbers for a Section 15 Lease. Actual numbers of livestock on the allotment will vary depending on resource and economic conditions as determined by the operator.



## 6. Visual Resources:

The allotment is located in a Class IV Visual Management Area. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

## 7. Air Quality:

The allotment is in a Class II area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act, which allows a moderate amount of air quality degradation. Air quality is generally good, Winds are typically southeasterly during the summer, and becoming southwesterly in the winter and early spring. Winds average 10 miles per hour in the fall and 16 miles per hour in the spring, with peak velocities reaching 50 miles per hour. These conditions rapidly disperse air pollutants in the region.

## 8. Recreation:

Recreation opportunities are very limited in this grazing allotment because the public has limited legal/physical access to public lands. The parcels of Public lands within this allotment are scattered and are generally surrounded by private lands.

Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

## 9. Caves and Karst:

A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment. Presently, no known significant caves or karst features have been identified within this allotment. If at a later date, a significant cave or karst feature is located on public lands within this allotment, that cave or feature may be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental analysis would be prepared to construct this enclosure fence.

# **IV. Environmental Impacts**

## **A. Impacts of the Proposed Action**

### 1. Soils:

The permitted use as described in the proposed action is not anticipated to have any adverse impact to the current soil conditions. Some soil loss would continue to occur due to the windy conditions that prevail in this region during parts of the year. If vegetative cover remains stable soil loss may be minimized.

Changes in vegetative ground cover is often linked to the amount and timing of precipitation events. This assessment is based on the assumption that the area will receive at least the long term average in precipitation both in timing and amount.

## 2. Vegetation:

The continuance of the permitted use at the current use levels authorized by the expiring lease is not anticipated to have any adverse impact to the current vegetative conditions. The vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores such as well rabbits, rodents and insects. Under the proposed action , it is not anticipated that a significant change in the vegetative composition or amount available for use will occur. The continuance of the present livestock management practices is not anticipated to alter the vegetative composition. The pastures will continue to get some deferment as outlined in the affected environment. Ecological condition and trend is expected to remain stable or improve over the long term at this permitted number.

## 3. Wildlife:

Under the proposed action, wildlife will continue to compete with domestic livestock for space, forage and browse. With proper livestock management and carrying capacities, there will be adequate cover and forage for most wildlife species; resulting in sustainable wildlife populations for those species that occupy or utilize the area. Maintenance and availability of existing waterings will continue to prove a dependable water source for wildlife, as well as livestock.

## 4. Threatened/Endangered Species:

Under the proposed action there would be no affect to Federal threatened and endangered species since there are no known T/E occurrences within this allotment.

### Special Status Species:

Under the proposed action, there would be no impact to the sand dune lizard due to the absence of suitable habitat. In one small area of public land impacts would be minimal due to the dispersal of livestock.

Under the proposed action, there are no anticipated adverse impacts to the lesser prairie chicken or its habitat since the allotment is on the extreme edge of the lesser prairie chicken area and there are no known booming grounds.

## 5 Livestock Management:

Under the proposed action there would be no impacts to the current livestock management. The allotment would continue to be grazed in the same manner as it is currently. It would also be anticipated that this area would continue to have

periodic deferment during other periods of the year.

#### 6. Visual Resources:

The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

#### 7. Air Quality:

The impacts to air quality would not change from the current situation. A minor amount of air quality degradation would continue.

#### 8. Recreation:

Grazing would have little or no effect on the recreational opportunities. Legal access to this parcel of public land would still remain available. Recreation activities that could occur within this grazing allotment are limited however due to land patterns.

#### 9. Significant Caves/Karst

No known significant caves or karst features are known to exist on the public lands located within this allotment. Grazing would not affect the karst resources.

### **B. Impacts of the No Livestock Grazing Alternative.**

The No Livestock Grazing Alternative has been previously analyzed at the National level in the Rangeland Reform '94 EIS and in the Roswell RMP/EIS. An in depth analysis of this alternative will not be made in this document. General impacts under this alternative would include no new rangeland improvement and the removal of existing rangeland improvements unless a determination was made that they were beneficial to other uses. Since no grazing authorizations on public lands would be permitted, livestock operators grazing lands adjoining Federal lands would be responsible for preventing the unauthorized use of these Federal lands. The BLM would not fence these lands. Rangeland administrative emphasis would shift to issuing crossing permits to or from nonfederal land inholdings and resolving unauthorized use.

### **V. Cumulative Impacts**

Cumulative impacts of the grazing and no grazing alternatives were considered in Chapter 4 of Rangeland Reform '94 Draft Environmental Impact Statement and in Chapter 4 of the Roswell Resource Area Proposed RMP/EIS. The no livestock grazing alternative was not selected in either document.

On the allotment specific level, there will be no cumulatively significant impacts from the proposed action /alternatives or from the no grazing alternative.

## **VI. Residual Impacts**

The area has been grazed by livestock since the early part of the 1900's if not longer. Recent vegetative monitoring studies have shown that grazing , at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action

## **VII. Mitigating Measures And/Or Permit/Lease Conditions**

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

## FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the **proposed action** will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rationale for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The **proposed action** will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

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T. R. Kreager,  
Acting Assistant Field Office Manager - Resources

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Date